

ICE MACHINE BASIC EDUCATION

Almost every kind of food service business needs an ice machine. Since there are such a large number of distinctive designs, configurations and styles available, it is vital to comprehend what is available to locate the best ice maker to suit your business' requirements

CONFIGURATIONS

Ice machines are important in all edible service businesses. Keeping up any type of eatery requires ice, heaps of ice, and the best way to meet your icy needs is with the right ice machine. If your eatery is stuck with a large commercial ice machine, you may be spending lavish expenses to make ice you need not to bother with.

This is inefficient and wasteful, as well as it is a superfluous budgetary venture bound to melt away money. On the opposite side of the cube, an undersized commercial ice machine can be just as disastrous; imagine unsatisfied customers with tepid beverages, and badly chilled nourishment that shrinks close by benefactor steadfastness. Once more, its possibly destroying cost to your business.

Commercial ice machines are not cheap, so when looking for your ideal frozen-water machine you have to consider two things: creation need and storage capacity. You have to guarantee that you are sufficiently making ice to address and meet the issues and needs of your customers.

While there are differences within each type, commercial ice machines commonly fall into three basic styles.

MODULAR ICE MACHINES



Modular ice machines are also known as ice machine heads. Modular ice machines incorporate Flake Ice Machines, Cube Ice Machines and Nugget Ice Machines. These modular ice machines are designed to be placed upon another bit of hardware, for example, an ice machine bin, an ice storage bin, drink dispenser, soda dispenser, or ice dispenser to hold the ice that is produced. Modular ice machines differ in width, depth and height which can be "22", "30" and "48" widths

and "20"& "23" heights and there are varieties of configurations of modular ice machines, so you can locate the careful ice machine heads that fit your area and your day by day ice requirement. The ice outputs of modular ice machines range from 240 lbs. every day to well more than 1200 lbs. every day.

COUNTERTOP ICE DISPENSER



Countertop ice dispensers /makers include Nugget ice maker, Compact ice dispenser, Ice maker water dispensers and Touchfree ice dispenser etc. These smaller units are frequently found in human services settings (i.e. health care industry), nursing home and lounge applications and may dispense water as well. They have a small bin, yet they can create up to 500 lbs. of ice every day, making them an incredible small commercial ice maker. They additionally dispense nugget ice, which gives a high caliber or quality and simpler to bite. Little bits of nugget ice make these machines ideal for dispensing, mixed refreshments, frosty treatment, and ice/water needs.

UNDERCOUNTER ICE MACHINES



Undercounter ice machines are also known as self-contained ice machines. An undercounter ice maker is a basic piece of any small edible businesses, cafes, bar and homes. Undercounter ice makers are outlined particularly to fit underneath countertops so that they can be set off the

beaten path of pedestrian activity while sufficiently creating ice to meet high demand of customers. For developing bars or eateries, an undercounter ice machine is a priceless bit of hardware that empowers barkeepers and servers to work more rapidly without sacrificing customer's service.

These commercial ice machines are made to create several pounds of ice at once while keeping it icy, giving you the volume of items you require without losing it to warmth. These ice machines come with either air-or water-cooled condensers to coordinate both the needs and capabilities of your eatery, and they are likewise separated by the kind of ice they make, including flakes, nuggets, octagons, full size cubes, regular size cubes, and half size cubes. These ice machines combine the ice machine with a storage bin.

ICE AND THE TYPES OF ICE

Ice is water, solidified into a strong state with the help of any ice machine. Ice comes in a wide range of shapes and types. In commercial ice machines, the ice may be different in terms of shapes and types. In fact, there are six noteworthy distinctive types and six shapes of ice that you may keep running into with commercial ice machines; these types include nuggets, flakes, cubes, full cubes, half cubes, crescent, and gourmet and the shapes of each of the types are different. Knowing the distinctive types and shapes of ice can help you to make a superior choice about the kind of ice that you may incline toward for your refreshments, nourishment display, or unique occasions.

NUGGETS ICE



- Slow dissolving;
- It is mostly found in health care industry and nursing home;
- It is milder and less demanding to chew than cube ice;
- It is also called chewable ice;
- It keeps the flavor of any bubbly drink and blended cocktail which makes it good for food service;
- It also works greatly in creating displays to keep food cool.

FLAKES ICE



- It is used to preserve food on display such as meat, fish produce and seafood;
- It can also be used in bubbly drinks and blended cocktails/drinks;
- It is a decent ice shape choice for transporting perishable goods;
- It is likewise the perfect ice sort for making mixed beverages;
- It is flaky, less demanding to mix and delicate and soft.

CUBES ICE



Ice cubes comprise half cubes and full cubes, Ice cubes are by a long shot the most well-known shape to find for ice. The cube is simply a good fit for any beverage and drink, and the shape is extremely prevalent at any establishment that serves beverages, for example, accommodation stores, eateries and bars. Additionally, ice cubes can also be found in ice dispensing machines and ice retailers. Ice cubes are characterized as follows:

- they help beverages to cool rapidly;
- they are moderate to soften and dissolving;
- they serve as perfect choice for food service industry;
- They are likewise incredible to use in mass for cooling or stowing purposes;
- They also serve as perfect utilization for blended mixed drinks, iced coffee and other remedial services such as therapeutic uses.

COMPRESSOR TYPES

Once you have chosen what sort of commercial ice machines and ice you need, the next vital thought to make is whether you need a compressor which can be an air-cooled, water-cooled, or remote compressor.

AIR COOLED



Air cooled ice machines compressor are frequently the most financially savvy type of ice machine compressor, as they do not include any extra water costs. Numerous air cooled models even accomplish Energy Star Compliance. Air cooled condensers do need no less than 5" of freedom around air intake and release areas, yet they are a decent choice for the larger part of users.

WATER COOLED



A water cooled ice machine compressor is a superior choice than an air cooled model of ice machine compressor just if one or a greater amount of the following conditions exists:

- The machine would be introduced and installed where surrounding air temperatures are more prominent than 85 degrees Fahrenheit;

- The machine would be introduced and installed in a zone where the air contains an abnormal state of contaminants, similar to oil;
- The machine would be introduced and installed in a zone with poor air flow or constrained space where clearance confinements of an air cooled machine could not be met.

Once more, unless one or a greater amount of the above conditions exist, a water-cooled machine is most likely not the best choice, since water utilization will be much higher than with an air cooled ice machine compressor. In fact, some districts do not allow the utilization of a water cooled ice machine compressor for that reason.

REMOTE COOLED



With remote ice machines compressor, the condenser is air cooled, and mounted outside, more often than not on a rooftop. Refrigerant lines keep running between the condenser and the machine. Accordingly, a remote gathering and condensing ice machine will be much calmer than its air or water-cooled partners.

On the other hand, installation and upkeep of a remote setup can be significantly more expensive, and a remote ice machine compressor is generally chosen if conditions preclude the utilization of an air cooled or water cooled.

ICE MACHINE SIZING

When you have settled on the sort of ice machine you need and the kind of ice you need, you should select a machine with the right volume for your needs.

- **For new organizations:** Make sure your evaluations take into consideration development and growth, or you could immediately surpass the creation volume of the machine you wish to buy.

- **For substitution ice machines:** Did your present ice machine meet up with demand? If no, you should assess the amount of volume you were missing and factor that into your valuations.
- **For every person:** Ice utilization at crest times should be considered, and in addition, any probability for a future increases in demand. It is generally better to have additional ice at hand than to depend on a machine that is too small to address and meet your issues and needs.

ADVANTAGES OF USING MULTIPLE ICE MACHINES

It may appear less demanding to supply all your ice from one expansive machine and bin, however, at the end, this is normally wasteful. With one and only huge machine, your staff will always be running forward and backward from the ice bin to soda machines, underbar ice chests and salad bars which waste your time and also increase the possibilities of cross-tainting.

Rather, consider utilizing many smaller machines, one on top of the soda dispenser, a little underbar unit and a little ice maker with a bin close to your salad bar, for instance. Along these lines your staff will dependably have ice when and where they require it, while additionally keeping the ice protected and clean.

INSTALLATION CONSIDERATIONS

- **Space and Placement:** Make beyond any doubt you have enough space for the machine, bin, and filter. Satisfactory air flow is significant and vital for maximum ice creation. Precisely considering the arrangement of the machine and bin can likewise expand employee profitability, productivity and efficiency.
- **Water Supply & Floor Drain:** Your ice machine will require a frosty water supply with a shutoff valve. A floor drain or channel is required as well. Check your nearby codes for particular drain or channel type and position necessities.
- **Power Supply:** Many ice machines do not accompany a string and attachment (i.e. cord and plug), so, a visit from your circuit tester (i.e. electrician) will be expected to hard wire the machine. Make sure you comprehend and meet the machine's energy requirements, note that, not all machines work on standard 110V electric. Electrical prerequisites and some other exceptional installation considerations will dependably be found on the machine's manual.

Utilize the graph beneath to get a thought for the amount of ice you may utilize. It's likewise essential to remember that encompassing room temperature and ventilation contemplation will influence the most extreme yield of any ice machine. This data is typically accessible on the producers Specification sheet.

Ice Sizing Guide (Includes 20% Safety Factor)

APPLICATION TYPE	TYPICAL DAILY ICE USE	ICE NEEDED FOR 100 CUSTOMERS	ICE NEEDED FOR 250 CUSTOMERS	ICE NEEDED FOR 500 CUSTOMERS	ICE NEEDED FOR 1000 CUSTOMERS	ICE NEEDED FOR 1500 CUSTOMERS
Restaurant	1.5 lbs ice per meal sold	180 lbs.	450 lbs.	900 lbs.	1800 lbs.	2700 lbs.
Cocktail Bar	3 lbs. ice per seat	360 lbs.	900 lbs.	1800 lbs.	3600 lbs.	5400 lbs.
Water Glass	6 oz. ice per 12 oz. glass	45 lbs.	113 lbs.	225 lbs.	450 lbs.	675 lbs.
Salad Bar	35 lbs. ice per cubic foot	---	---	---	---	---
Beverage Only	5 oz. ice per 7-10 oz. cup	38 lbs.	94 lbs.	188 lbs.	375 lbs.	563 lbs.
Beverage Only	8 oz. ice per 12-16 oz. cup	60 lbs.	150 lbs.	300 lbs.	600 lbs.	900 lbs.
Beverage Only	12 oz. ice per 18-24 oz. cup	90 lbs.	225 lbs.	450 lbs.	900 lbs.	1350 lbs.
Guest Ice	5 lbs. per hotel room	600 lbs.	1500 lbs.	3000 lbs.	6000 lbs.	9000 lbs.
Hotel Catering	1 lb. per person	120 lbs.	300 lbs.	600 lbs.	1200 lbs.	1800 lbs.
Patient Ice	10 lbs. per	1200 lbs.	3000 lbs.	6000 lbs.	12000 lbs.	18000 lbs.

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	person					
Cafeteria	1 lb. per person	120 lbs.	300 lbs.	600 lbs.	1200 lbs.	1800 lbs.

ICE MACHINE BIN SIZING



An ice machine bin gives you a chance to hold ice until it is ready for utilization. At the point when picking a bin to run with your ice machine, you will need to consider a few focuses:

- Choose a bin/machine combination that is too big and vast, and it could bring about squandered ice, making the bin a reproducing ground for microorganisms and mold because of abundance melt water.
- Choosing a little ice machine and bin combination may let you running out of ice and burdened your ice machine as it battles to keep up.
- Do not assume the bin needs to equal or tie the volume of your ice machine. In the event that your eatery is busiest on the weekend, for instance, you may require 900 lbs. of ice, yet not almost that much during the week. Matching a little ice machine with an expansive bin will guarantee you do not have excess ice during the week, and that regardless you will sufficiently aggregate ice to handle the weekend surge. You can discover good bins in the Companion Items of a large portion of ice machines.

FILTERS



To prolong the life of your ice machine and expand your customers satisfaction (recall, ice is sustenance, i.e. food), we suggest utilizing a water filter with each ice machine, in light of the fact that, it will lessen the development of mineral deposits inside the machine. The advantages of utilizing a water filter with your ice machine cannot be understated; however, here are some couples of the advantages:

- Better tasting drinks;
- Higher ice creation;
- Lower vitality and energy usage, since the ice machine can work more productively and effectively;
- Longer ice machine life;
- Poor quality food water will void the warranty on most ice machines.

ACCESSORIES

ICE DISPENSERS

An ice dispenser is like a bin in idea - it holds ice until it is ready for utilization and yet, it takes out human contact with the ice supply by utilizing a lever dispenser system. There are two essential types:



- **Hotel Dispensers:** An ice machine is mounted on top and the dispenser holds the ice. This lets visitors get ice at their recreation and you do not have to stress over them polluting the ice with hands, cups, mugs, and so on.



- **Countertop Dispensers:** These are most basic at medical caretaker stations (i.e. nursing homes) and other medicinal services applications because of their minimized size, and various countertop dispensers likewise dispense water as well. There are two types, ones that incorporate an implicit ice machine and models that oblige the ice be stacked physically.

BIN ADAPTERS

Bin adapters are utilized as a part of a few circumstances.

- Installing one or all more little ice machines on a major bin;
- Installing an ice machine on top of a dispenser;
- Installing one brand of ice machine on an alternate brand of ice machine bin.

Remember that numerous types of adapters are accessible for particular circumstances, and are frequently recorded on the Producer's Specification Sheet. Contingent upon your application, you might likewise require an ice deflector set up of or in addition to adapter.

ICE MACHINE CLEANER

Indeed, even with the best possible filter unit, your machine will bit by bit gather mineral deposits inside, hurting performance and productivity. An Arctic ice machine cleaner is alright and safe for utilization in all ice machines and will remove all these mineral deposits, while additionally securing tin and nickel-plated evaporators. The Arctic cleaner is available in both a ready to use formula and a concentrated cleaner.



HEAT EXCHANGER

A heat exchanger uses cool waste water from your ice machine to pre-chill consumable water that is entering your machine. Since the water is already icy, your ice machine spends less vitality in making ice, which cuts costs and permits more effective and efficient operation.

ICE BAGGERS



If you anticipate selling packs of ice, a bagger unit may be an advantageous speculation. For little volume applications, we offer edges that fit directly over the ice bin entryway opening and channel ice down into the sack. On the other hand, for substantial scale use where you will be selling and packing heaps of ice, we offer units that are specially designed to stock and load the item or product.

OTHER ACCESSORIES THAT ARE IMPORTANT

- Sanitary Ice Buckets;
- Ice Bin Scoops.

These two items go as an inseparable unit. To stay in accordance with the regulations of health, sanitation and to maintain wellbeing, utilize these accessories to transport ice from the bin to different areas around your establishment, and make sure your worker use them instead of mugs, hands or cups.